

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



550 313

(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/093906 A1

(51) International Patent Classification⁷: **A61K 39/205**

(21) International Application Number:
PCT/US2004/006089

(22) International Filing Date: 23 March 2004 (23.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/457,876 26 March 2003 (26.03.2003) US
60/546,733 23 February 2004 (23.02.2004) US

(71) Applicant (for all designated States except US): **WYETH**
[US/US]; Five Giralda Farms, Madison, NJ 07940 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ELDRIDGE, John, H.** [US/US]; 16 Wellington Lane, Somers, NY 10589 (US). **ISRAEL, Zimra, R.** [US/US]; 200 Riverside Blvd. #402, New York, NY 10069 (US). **EGAN, Michael, A.** [US/US]; 3212 Whispering Hills, Chester, NY 10918 (US). **UDEM, Stephen, A.** [US/US]; 155 West 70th Street, Apt. 6F/G, New York, NY 10023 (US).

(74) Agents: **BAK, Mary, E. et al.**; Howson and Howson, 321 Norristown Road, Suite 200, Spring House Corporate Center, P.O. Box 457, Spring House, PA 19477 (US).

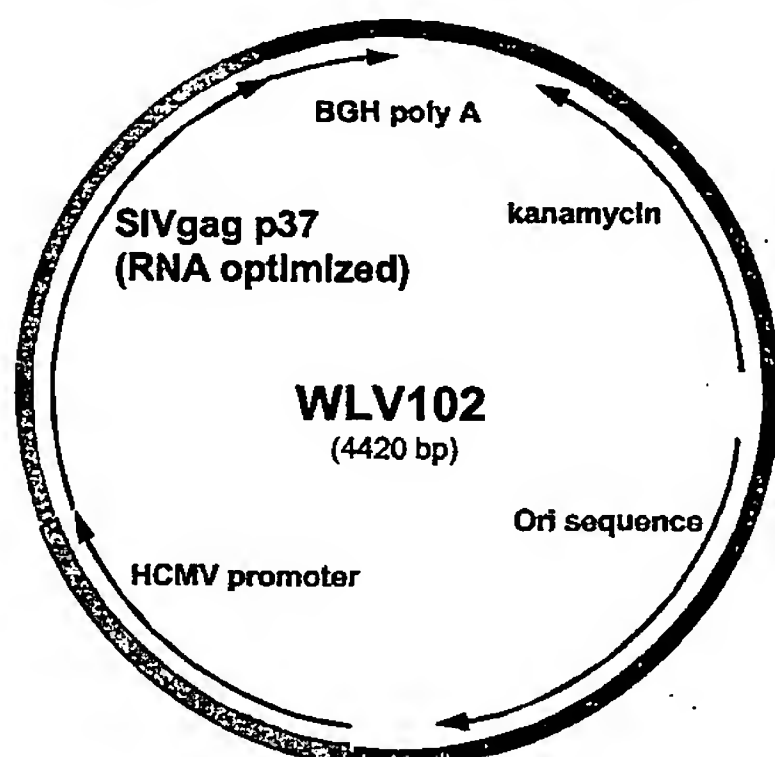
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

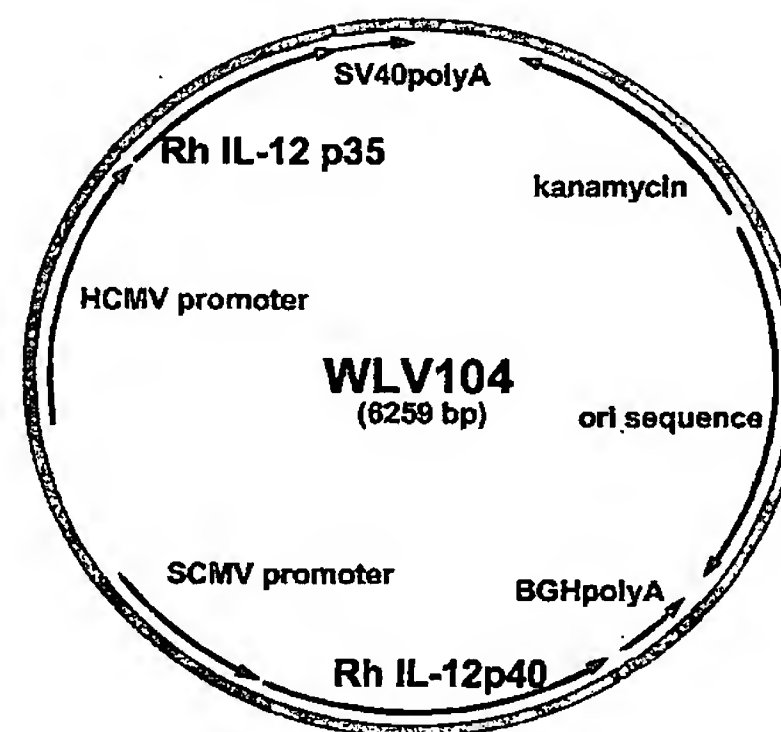
(54) Title: IMMUNOGENIC COMPOSITION AND METHODS

RNA optimized SIV gag p37



A

Dual promoter Rhesus IL12



B

(57) Abstract: A method of inducing an antigen-specific immune response in a mammalian subject includes the steps of administering to the subject an effective amount of a first composition comprising a DNA plasmid comprising a DNA sequence encoding an antigen under the control of regulatory sequences directing expression thereof in a mammalian or vertebrate cell. The method also includes administering to the subject an effective amount of a second composition comprising a recombinant vesicular stomatitis virus (rVSV) comprising a nucleic acid sequence encoding the antigen under the control of regulatory sequences directing expression thereof in the mammalian or vertebrate cell. The rVSV is in one embodiment replication competent. Kits for use in immunizations and therapeutic treatments of disease include the components and instructions for practice of this method.

WO 2004/093906 A1



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.